



**UNITED STATES DEPARTMENT OF COMMERCE**  
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AS

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/424,811 11/30/99 GILCHRIST

T 1066-99

EXAMINER

IM22/0913

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ART UNIT

PAPER NUMBER

1731

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09/13/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

## Office Action Summary

Application No.

09/424,811

Applicant(s)

GILCHRIST ET AL.

Examiner

John Hoffmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8 and 10-15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no support for the new limitation of maintaining the temperature of the portion at the working temperature. Examiner could find no support for the limitation - explicit or implicit. The burden is on Applicant to show that there was support for this new limitation.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilchrist 5470585 in view of Loewenstein (The Manufacturing Technology of Continuous Glass Fibres, 1983) and Tooley (Handbook of Glass Manufacture, 1954).

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Gilchrist disclose the invention of fibers of dissolvable fibers - see claims 1 and 3. The secondary references are cited that it is well known to create glass products by heating raw materials at very high temperatures and then cooling the glass down before forming glass. High temperatures are used because homogenization and reduction of stones occurs much faster at higher temperatures - mostly because the glass is much more fluid, but also because higher temperatures and better kinetics usually go hand-in-hand. But glass that is too fluid to form into glass must be cooled to the appropriate viscosity for forming. See especially Loewenstein , page 32, lines 3-4 and figure IV/29 at page 103 and Tooley, page, 243, col. 1, lines 25-31; p 254, fig IX B, 23; p 256, second full paragraph; and page 283, fig IX D.1.

It would have been obvious to create the Gilchrist fibers by heating the starting materials to a temperature, so as to form the molten glass as quickly as possible and then cool it to a temperature to form the fibers - because the higher the temperature, the faster the glass is homogenized, which means the more glass that can be made in a day's time.

As to the new limitation that the glass is maintained at the working temperature, such would have occurred in the prior art combination in as much as it occurred in Applicant's invention.

As to claim 2, 'slowly' is a relative term. It would have been obvious to cool the glass at a rate slower than that achieved by pouring molten glass into liquid nitrogen, because it takes quite an effort and expense to cause glass to cool that quickly.

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As to claims 3-4, it would have been obvious to perform routine experimentation to determine the optimal temperature for forming the fibers - if the temperature is too high, the glass would flow like water out of the bushing. If the temperature were too low, the glass would be too viscous to flow through the bushing. Alternatively, one can arbitrarily choose any of the temperatures at which the molten glass is at to be the "working temperature, so that it is in the 50-300 range. For example, one can arbitrarily choose the "working temperature" to be  $T_g + 250$ ; the "working temperature" is defined broadly - if at all. It is noted that the claims do not require holding the glass at the "working temperature". One can deem that the cooling to  $T_g$  is part of the claimed "processing". Applicant's disclosed "processing" would inherently require cooling to room temperature.

Claim 5: See Gilchrist, col. 3, lines 45-46.

Claim 6: See Gilchrist, col. 3, lines 63-65.

Claim 7-8: See Gilchrist, col. 3, lines 60-62.

Claims 10-15 are clearly met. Claim 10 see claim 7 of Gilchrist.

### ***Response to Arguments***

In response to applicant's argument that Tooley and Loewenstein is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443

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(Fed. Cir. 1992). In this case, all of the references are in the field of applicant's endeavor - creating a glass product from raw materials. Generally speaking, a glass is a glass - one of ordinary skill realizes that if one glass forming process works for a glass composition, it will generally work for all other glasses. There are of course exceptions to this, but since Gilcrest teaches using conventional methods, one would expect that any conventional method could be used - regardless of composition.

It is argued that conventional methods of forming water-insoluble glass fibers are not successful when used to process water-soluble glass formulations. There is no evidence or rationale given to support this. Even if that someone somewhere found that conventional techniques fail, one would probably conclude that this attempt was faulty for some unknown reason unrelated to the conventional technique or the composition. because Gilchrist teaches at col. 4, lines 42-45 teaches that conventional methods work.

It is argued that the soluble glass compositions do not lend themselves to conventional processing methods. This argument is unfathomable. No evidence is supplied. If Applicant can demonstrate that conventional techniques will not work with the instant composition, such will be used as evidence that Applicant's own invention is not enable - because it requires a conventional technique be used.

### ***Information Disclosure Statement***

As to the two requests for reconsideration of the Information Disclosure Statement of 23 June 2001:

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It is argued that the Japanese patents were not readily available. If this is the case, then there should be no mention of the patents on the PTOL 1449. The Office will not falsely represent to the public - or anyone - that a document was received and considered - if only an abstract was received and considered. The Office policy is that if an Applicant fails to complete and accurately describe what they want to be considered - SUCH WILL NOT BE CONSIDERED.

The supplemental request for reconsideration filed 05 July 2001 contained a modified PTOL-1449 form. There is no indication that the 1449 was to be treated as an new/supplemental information disclosure statement - rather it was only to be used if the Office determine that the previous IDS was improperly treated. If Applicant wishes to file any additional information disclosure statement, the perquisite fees/petition/certifcation is required.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



9-12-01